

AMENDMENTS TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims**1-38. (Cancelled)**

39. (New) An isolated nucleic acid molecule selected from the group consisting of

- a) an isolated *Corynebacterium glutamicum* nucleic acid molecule comprising the nucleotide sequence set forth in SEQ ID NO:179, or a complement thereof;
- b) an isolated nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence set forth in SEQ ID NO:180, or a complement thereof;
- c) an isolated nucleic acid molecule which encodes a naturally occurring allelic variant of a polypeptide comprising the amino acid sequence set forth in SEQ ID NO:180, or a complement thereof;
- d) an isolated nucleic acid molecule comprising a nucleotide sequence which is at least 50% identical to the entire nucleotide sequence set forth in SEQ ID NO:179, or a complement thereof; and
- e) an isolated nucleic acid molecule comprising a fragment of at least 15 contiguous nucleotides of the nucleotide sequence set forth in SEQ ID NO:179, or a complement thereof.

40. (New) An isolated nucleic acid molecule comprising the nucleic acid molecule of claim 39 and a nucleotide sequence encoding a heterologous polypeptide.

41. (New) A vector comprising the nucleic acid molecule of claim 39.

42. (New) The vector of claim 41, which is an expression vector.

43. (New) A host cell transfected with the expression vector of claim 42.

44. (New) The host cell of claim 43, wherein said cell is a microorganism.

45. (New) The host cell of claim 44, wherein said cell belongs to the genus *Corynebacterium* or *Brevibacterium*.

46. (New) A method of producing a polypeptide comprising culturing the host cell of claim 43 in an appropriate culture medium to, thereby, produce the polypeptide.

47. (New) A method for producing a fine chemical, comprising culturing the cell of claim 43 such that the fine chemical is produced.

48. (New) The method of claim 47, wherein said method further comprises the step of recovering the fine chemical from said culture.

49. (New) The method of claim 47, wherein said cell belongs to the genus *Corynebacterium* or *Brevibacterium*.

50. (New) The method of claim 47, wherein said cell is selected from the group consisting of *Corynebacterium glutamicum*, *Corynebacterium herculis*, *Corynebacterium lilium*, *Corynebacterium acetoacidophilum*, *Corynebacterium acetoglutamicum*, *Corynebacterium acetophilum*, *Corynebacterium ammoniagenes*, *Corynebacterium fujiiokense*, *Corynebacterium nitrilophilus*, *Brevibacterium ammoniagenes*, *Brevibacterium butanicum*, *Brevibacterium divaricatum*, *Brevibacterium flavum*, *Brevibacterium healii*, *Brevibacterium ketoglutamicum*,

Brevibacterium ketosoreductum, *Brevibacterium lactofermentum*, *Brevibacterium linens*, *Brevibacterium paraffinolyticum*, and those strains set forth in Table 3.

51. (New) The method of claim 47, wherein expression of the nucleic acid molecule from said vector results in modulation of production of said fine chemical.

52. (New) The method of claim 47, wherein said fine chemical is selected from the group consisting of organic acids, proteinogenic and nonproteinogenic amino acids, purine and pyrimidine bases, nucleosides, nucleotides, lipids, saturated and unsaturated fatty acids, diols, carbohydrates, aromatic compounds, vitamins, cofactors, polyketides, and enzymes.

53. (New) The method of claim 47, wherein said fine chemical is an amino acid selected from the group consisting of lysine, glutamate, glutamine, alanine, aspartate, glycine, serine, threonine, methionine, cysteine, valine, leucine, isoleucine, arginine, proline, histidine, tyrosine, phenylalanine, and tryptophan.

54. (New) An isolated polypeptide selected from the group consisting of

- a) an isolated polypeptide comprising the amino acid sequence set forth in SEQ ID NO:180;
- b) an isolated polypeptide which is encoded by a nucleic acid molecule comprising the nucleotide sequence of SEQ ID NO:179;
- c) an isolated polypeptide comprising a naturally occurring allelic variant of a polypeptide comprising comprising the amino acid sequence set forth in SEQ ID NO:180;
- d) an isolated polypeptide which is encoded by a nucleic acid molecule comprising a nucleotide sequence which is at least 50% identical to the entire nucleotide sequence set forth in SEQ ID NO:179;

- e) an isolated polypeptide comprising an amino acid sequence which is at least 50% identical to the entire amino acid sequence set forth in SEQ ID NO:180; and
- f) an isolated polypeptide comprising a fragment of a polypeptide comprising the amino acid sequence set forth in SEQ ID NO:180, wherein said polypeptide fragment maintains a biological activity of the polypeptide comprising the amino sequence.

55. (New) The isolated polypeptide of claim 54, wherein said polypeptide is involved in the production of a fine chemical.

56. (New) The isolated polypeptide of claim 54, further comprising heterologous amino acid sequences.

57. (New) A method for diagnosing the presence or activity of *Corynebacterium diphtheriae* in a subject, comprising detecting the presence of at least one of the nucleic acid molecules of claim 1, thereby diagnosing the presence or activity of *Corynebacterium diphtheriae* in the subject.

58. (New) A method for diagnosing the presence or activity of *Corynebacterium diphtheriae* in a subject, comprising detecting the presence of at least one of the polypeptide molecules of claim 54, thereby diagnosing the presence or activity of *Corynebacterium diphtheriae* in the subject.

59. (New) A host cell comprising a nucleic acid molecule selected from the group consisting of

- a) a nucleic acid molecule comprising the nucleotide sequence set forth in SEQ ID NO:179, wherein the nucleic acid molecule is disrupted by at least one technique selected from the group consisting of a point mutation, a truncation, an inversion, a deletion, an addition, a substitution and homologous recombination;
- b) a nucleic acid molecule comprising the nucleotide sequence set forth in SEQ ID NO:179, wherein the nucleic acid molecule comprises one or more nucleic acid

modifications as compared to the sequence set forth in SEQ ID NO:179, wherein the modification is selected from the group consisting of a point mutation, a truncation, an inversion, a deletion, an addition and a substitution; and

- c) a nucleic acid molecule comprising the nucleotide sequence set forth in SEQ ID NO:179, wherein the regulatory region of the nucleic acid molecule is modified relative to the wild-type regulatory region of the molecule by at least one technique selected from the group consisting of a point mutation, a truncation, an inversion, a deletion, an addition, a substitution and homologous recombination.